

WHAT IS CLAIMED IS:

1. A communication apparatus comprising:

detection means for detecting a facsimile function of a communication partner's apparatus during communication by G3 facsimile communication means; and

control means for performing control of causing said G3 facsimile communication means to disconnect communication in a G3 facsimile mode and shifting to communication by Internet facsimile communication means, based on the detection of the facsimile function of the communication partner's apparatus by said detection means.

2. A communication apparatus according to Claim 1, further comprising storage means for storing the function of the communication partner's apparatus, wherein said control means stores the facsimile function of the communication partner's apparatus detected by said detection means in said storage means, obtains the facsimile function of the communication partner's apparatus stored in said storage means from said storage means, and causes said Internet facsimile communication means to transmit image data in accordance with the obtained facsimile function of the communication partner's apparatus.

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wherein the image file comprises a TIFF (Tag Image Data Format) file.

7. A communication apparatus according to Claim 4, wherein the Internet address comprises an E-mail address.

8. A communication apparatus according to Claim 1, further comprising determination means for determining whether or not the communication is a first communication operation with the communication partner's apparatus by said Internet facsimile communication means, wherein said control means performs G3 facsimile communication before the communication by said Internet facsimile communication means, based on determination that the communication is a first communication operation with the communication partner's apparatus by said Internet facsimile communication means, and causes said G3 facsimile communication means to disconnect the communication in the G3 facsimile mode and shifts to communication by said Internet facsimile communication means, based on the detection of the facsimile function of the communication partner's apparatus by said detection means, and performs control of image transmission by said Internet facsimile communication means in accordance with the facsimile function of the communication partner's apparatus.

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9. A communication apparatus comprising:

detection means for detecting a facsimile function of a communication partner's apparatus during communication by G3 facsimile communication means; and

control means for causing Internet facsimile communication means to transmit an image in accordance with the facsimile function of the communication partner's apparatus detected by said detection means.

10. A communication apparatus according to Claim 9, further comprising storage means for storing the function of the communication partner's apparatus, wherein said control means stores the facsimile function of the communication partner's apparatus detected by said detection means in said storage means, obtains the facsimile function of the communication partner's apparatus stored in said storage means from said storage means, and causes said Internet facsimile communication means to transmit image data in accordance with the obtained facsimile function of the communication partner's apparatus.

11. A communication apparatus according to Claim 10, further comprising determination means for determining whether or not the communication is a first communication operation with the communication partner's apparatus by said

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Internet facsimile communication means, wherein said control means causes said G3 facsimile communication means to transmit image data in a first communication operation, based on determination by said determination means that the communication is a first communication operation with the communication partner's apparatus by said Internet facsimile communication means, and causes said Internet facsimile communication means to transmit image data in accordance with the facsimile function of the communication partner's apparatus stored in said storage means, based on determination by said determination means that the communication is not a first communication operation with the communication partner's apparatus by said Internet facsimile communication means.

12. A communication method comprising the steps of:

detecting a facsimile function of a communication partner's apparatus during communication in a G3 facsimile mode;

disconnecting communication in the G3 facsimile mode based on the detection of the facsimile function of the communication partner's apparatus; and

shifting to communication in an Internet facsimile mode.

14. A communication method according to Claim 12, wherein, when shifting from the G3 facsimile mode to the Internet facsimile mode, a signal indicating to which of Internet facsimile modes a mode is to be switched is transmitted.

16. A communication method according to Claim 13, wherein the Internet facsimile mode is a mode in which a read image is converted into an image file, the image file is added to an E-mail, and the E-mail is transmitted, and in which a DIS signal received in the G3 facsimile mode is stored so as to correspond to an Internet facsimile address of the communication partner's apparatus, and the read image

is converted into the image file in accordance with the stored DIS signal during transmission of the image in the Internet facsimile mode.

17. A communication method according to Claim 16, wherein the image file comprises a TIFF file.

18. A communication method according to Claim 15, wherein the Internet address comprises an E-mail address.

19. A communication method according to Claim 12, wherein it is determined whether or not the communication is a first communication operation in the Internet facsimile mode with the communication partner's apparatus, wherein G3 facsimile communication is performed before communication in the Internet facsimile mode, based on determination that the communication is a first communication operation in the Internet facsimile mode with the communication partner's apparatus, and the communication in the G3 facsimile mode is disconnected and the communication shifts to communication in the Internet facsimile mode, based on the detection of the facsimile function of the communication partner's apparatus, and image transmission in the Internet facsimile mode is performed in accordance with the function of the communication partner's apparatus.

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detecting a facsimile function of a communication partner's apparatus during communication in the G3 facsimile mode; and

21. An image communication method according to Claim 20, wherein the detected facsimile function of the communication partner's apparatus is stored, and wherein image data is transmitted in the Internet facsimile mode in accordance with the stored facsimile function of the communication partner's apparatus.

22. An image communication method according to Claim 21, wherein it is determined whether or not the communication is a first communication operation in the Internet facsimile mode with the communication partner's apparatus, wherein image data is transmitted in the G3 facsimile mode in a first communication operation, based on determination that the communication is a first communication operation in



the Internet facsimile mode with the communication partner's apparatus, and wherein an image is transmitted in the Internet facsimile mode in accordance with the facsimile function of the communication partner's apparatus, based on determination that the communication is not a first communication operation in the Internet facsimile mode with the communication partner's apparatus.

23. An image communication apparatus having an Internet facsimile mode and a G3 facsimile mode, said apparatus comprising:

function notification means for notifying a communication partner's apparatus that said image communication apparatus has an Internet facsimile function during communication in the G3 facsimile mode; and

address notification means for notifying the communication partner's apparatus of an Internet facsimile address during the communication in the G3 facsimile mode.

24. An image communication apparatus according to Claim 23, wherein said address notification means notifies the communication partner's apparatus of the Internet facsimile address, according to reception of a signal instructing communication in the Internet facsimile mode in response to the notification of the function after said function notifica-

tion means has notified the communication partner's apparatus that said image communication apparatus has the Internet facsimile function.

25. An image communication method having an Internet facsimile mode and a G3 facsimile mode, said method comprising the steps of:

notifying a communication partner's apparatus that a transmitter's apparatus has an Internet facsimile function during communication in the G3 facsimile mode; and

notifying the communication partner's apparatus of an Internet facsimile address during the communication in the G3 facsimile mode.

26. An image communication method according to Claim 25, wherein the Internet facsimile address is notified to the communication partner's apparatus, according to reception of a signal instructing communication in the Internet facsimile mode in response to the notification of the function after the communication partner's apparatus has been notified that transmitter's apparatus has the Internet facsimile function.

27. A communication apparatus comprising:

detection means for detecting an Internet facsimile

mode of a communication partner's apparatus during communication by G3 facsimile communication means; and

control means for performing control of causing said G3 facsimile communication means to disconnect communication in a G3 facsimile mode and shifting to communication by Internet facsimile communication means, based on the detection of the Internet facsimile mode of the communication partner's apparatus by said detection means.

28. A communication apparatus according to Claim 27, further comprising storage means for storing a function of the communication partner's apparatus, wherein said control means stores the Internet facsimile mode of the communication partner's apparatus detected by said detection means in said storage means, obtains the Internet facsimile mode of the communication partner's apparatus stored in said storage means from said storage means, and causes said Internet facsimile communication means to transmit image data in accordance with the obtained Internet facsimile mode of the communication partner's apparatus.

29. A communication apparatus according to Claim 27, wherein said G3 facsimile communication means transmits a signal instructing to which of Internet facsimile modes a mode is to be switched.

30. A communication apparatus according to Claim 27, wherein said G3 facsimile communication means transmits a signal notifying an Internet address of said communication apparatus.

31. A communication apparatus according to Claim 28, wherein said Internet facsimile communication means comprises transmission means for transmitting an E-mail, conversion means for converting a read image into an image file, and addition means for adding the image file to the E-mail, and wherein said control means stores a DIS signal received by said G3 facsimile communication means in said storage means so as to correspond to an Internet facsimile address of the communication partner's apparatus, and causes said conversion means to convert the read image into the image in accordance with the DIS signal stored in said storage means, during image transmission by said Internet facsimile communication means.

32. A communication apparatus according to Claim 31, wherein the image file comprises a TIFF file.

33. A communication apparatus according to Claim 30, wherein the Internet address comprises an E-mail address.

34. A communication apparatus according to Claim 27, further comprising determination means for determining whether or not the communication is a first communication operation with the communication partner's apparatus by said Internet facsimile communication means, wherein said control means performs G3 facsimile communication before the communication by said Internet facsimile communication apparatus, based on determination that the communication is a first communication operation with the communication partner's apparatus by said Internet facsimile communication means, and causes said G3 communication means to disconnect the communication in the G3 facsimile mode and shifts to communication by said Internet facsimile communication means, based on the detection of the Internet facsimile mode of the communication partner's apparatus by said detection means, and performs control of image transmission by said Internet facsimile communication means in accordance with the Internet facsimile mode of the communication partner's apparatus.

35. A communication apparatus according to Claim 27, wherein the plurality of Internet facsimile modes comprise a simple mode, a full mode, and a real time mode.

36. A communication apparatus according to Claim 35, wherein, when shifting to the Internet facsimile mode, said control means selects one of the simple mode, the full mode and the real time mode from among the Internet facsimile modes possessed by the communication partner's apparatus according to a predetermined priority, and causes said Internet facsimile communication means to perform communication in the selected mode.

37. A communication apparatus according to Claim 35, wherein said control means performs the selection in the order of the real time mode, the full mode, and the simple mode.

38. A communication apparatus according to Claim 35, wherein said control means performs the selection in the order of the full mode, the real time mode, and the simple mode.

39. A communication apparatus according to Claim 35, wherein said Internet facsimile communication means comprises transmission means for transmitting an E-mail, conversion means for converting a read image into an image file, and addition means for adding the image file to the E-mail, and wherein, when the simple mode or the full mode of

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Internet facsimile has been selected, said control means causes said Internet facsimile communication means to transmit the E-mail where an image file formed in accordance with each mode is added.

40. A communication apparatus according to Claim 39, wherein the image file comprises a TIFF file, and wherein the Internet address comprises an E-mail address.

41. A communication apparatus according to Claim 35, wherein said Internet facsimile communication means comprises means for transmitting TCP packets to an Internet address, means for receiving TCP packets, means for converting a T30 frame into TCP packets, and means for converting TCP packets into a T30 frame, and wherein, when the real time mode has been selected, said control means causes said Internet facsimile communication means to covert a procedure signal and image data into TCP packets, transmit the obtained TCP packets according to a T30 facsimile procedure, and convert TCP packets received from the communication partner's apparatus into a T30 frame.

42. A communication apparatus comprising:

detection means for detecting an Internet facsimile mode of a communication partner's apparatus during com-

munication by G3 facsimile communication means; and

control means for causing Internet facsimile communication means to transmit an image in accordance with the Internet facsimile mode of the communication partner's apparatus detected by said detection means.

43. A communication apparatus according to Claim 42, further comprising storage means for storing a function of the communication partner's apparatus, wherein said control means stores the Internet facsimile mode of the communication partner's apparatus detected by said detection means in said storage means, obtains the Internet facsimile mode of the communication partner's apparatus stored in said storage means from said storage means, and causes said Internet facsimile communication means to transmit image data in accordance with the obtained Internet facsimile mode of the communication partner's apparatus.

44. A communication apparatus according to Claim 43, further comprising determination means for determining whether or not the communication is a first communication operation with the communication partner's apparatus by said Internet facsimile communication means, wherein said control means causes said G3 facsimile communication means to transmit image data in a first communication operation, based on



determination by said determination means that the communication is the first communication operation with the communication partner's apparatus by said Internet facsimile communication means, and causes said Internet facsimile communication means to transmit image data in accordance with the Internet facsimile mode of the communication partner's apparatus stored in said storage means, based on determination by said determination means that the communication is not a first communication operation with the communication partner's apparatus by said Internet facsimile communication means.

45. A communication apparatus according to Claim 42, wherein a plurality of Internet facsimile modes comprise a simple mode, a full mode, and a real time mode.

46. A communication apparatus according to Claim 45, wherein, when shifting to the Internet facsimile mode, said control means selects one of the simple mode, the full mode and the real time mode from among the Internet facsimile modes possessed by the communication partner's apparatus according to a predetermined priority, and causes said Internet facsimile communication means to perform communication in the selected mode.

47. A communication apparatus according to Claim 45, wherein said control means performs the selection in the order of the real time mode, the full mode, and the simple mode.

48. A communication apparatus according to Claim 45, wherein said control means performs the selection in the order of the full mode, the real time mode, and the simple mode.

49. A communication apparatus according to Claim 45, wherein said Internet facsimile communication means comprises transmission means for transmitting an E-mail, conversion means for converting a read image into an image file, and addition means for adding the image file to the E-mail, and wherein, when the simple mode or the full mode of Internet facsimile has been selected, said control means causes said Internet facsimile communication means to transmit the E-mail where an image file formed in accordance with each mode is added.

50. A communication apparatus according to Claim 49, wherein the image file comprises a TIFF file, and wherein the Internet address comprises an E-mail address.

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51. A communication apparatus according to Claim 45, wherein said Internet facsimile communication means comprises means for transmitting TCP packets to an Internet address, means for receiving TCP packets, means for converting a T30 frame into TCP packets, and means for converting TCP packets into a T30 frame, and wherein, when the real time mode has been selected, said control means causes said Internet facsimile communication means to covert a procedure signal and image data into TCP packets, transmit the obtained TCP packets according to a T30 facsimile procedure, and convert TCP packets received from the communication partner's apparatus into a T30 frame.

52. A communication method comprising the steps of:

detecting an Internet facsimile mode of a communication partner's apparatus during communication in a G3 facsimile mode;

disconnecting the communication in the G3 facsimile mode and performing setting according to the detected Internet facsimile mode based on the detection of the Internet facsimile mode of the communication partner's apparatus; and  
shifting to Internet communication.

53. A communication method according to Claim 52, wherein the detected Internet facsimile mode of the com-

54. A communication method according to Claim 52, wherein, when shifting from the G3 facsimile mode to the Internet facsimile mode, a signal indicating to which of Internet facsimile modes a mode is to be switched is transmitted.

55. A communication method according to Claim 52, wherein a signal notifying an Internet address of a transmitter's apparatus is transmitted in the G3 facsimile mode.

56. A communication method according to Claim 53, wherein the Internet facsimile mode is a mode in which a read image is converted into an image file, the image file is added to an E-mail, and the E-mail is transmitted, and in which a DIS signal received in the G3 facsimile mode is stored so as to correspond to an Internet facsimile address of the communication partner's apparatus, and the read image is converted into the image file in accordance with the stored DIS signal during transmission of the image in the

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60. A communication method according to Claim 52,

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64. A communication method according to Claim 61, wherein, when the simple mode or the full mode of Internet facsimile has been selected, Internet facsimile communication means is caused to transmit the E-mail where an image file formed in accordance with each mode is added.

65. A communication method according to Claim 61, wherein, when the real time mode has been selected, Internet facsimile communication means is caused to convert a procedure signal and image data into TCP packets, transmit the obtained TCP packets according to a T30 facsimile procedure, and convert TCP packets received from the communication partner's apparatus into a T30 frame.

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61 } 66. An image communication method having an Internet facsimile mode and a G3 facsimile mode, said method comprising the steps of:

detecting an Internet facsimile mode of a communication partner's apparatus during communication in the G3 facsimile mode; and

transmitting an image in the Internet facsimile mode in accordance with the detected Internet facsimile mode of the communication partner's apparatus.

67. An image communication method according to Claim 66, wherein the detected Internet facsimile mode of the communication partner's apparatus is stored, and wherein image data is transmitted in the Internet facsimile mode in accordance with the stored Internet facsimile mode of the communication partner's apparatus.

68. An image communication method according to Claim 67, wherein it is determined whether or not the communication is a first communication operation with the communication partner's apparatus in the Internet facsimile mode, and wherein image data is transmitted in the G3 facsimile mode in a first communication operation, based on determination that the communication is the first communication operation in the Internet facsimile mode with the communication partner's apparatus, and image data is transmitted in the Internet facsimile mode in accordance with the Internet facsimile mode of the communication partner's apparatus, based on determination that the communication is not a first communication operation in the Internet facsimile mode with the communication partner's apparatus.

69. An image communication method according to Claim 66, wherein a plurality of Internet facsimile modes comprise a simple mode, a full mode, and a real time mode.

50. An image communication method according to Claim 69, wherein, when shifting to the Internet facsimile mode, one of the simple mode, the full mode and the real time mode is selected from among the Internet facsimile modes possessed by the communication partner's apparatus according to predetermined priority, and communication in the selected



Internet facsimile mode is performed.


71. An image communication method according to Claim 70, wherein the selection is performed in the order of the real time mode, the full mode, and the simple mode.

72. An image communication method according to Claim 70, wherein, when the simple mode or the full mode of Internet facsimile has been selected, Internet facsimile communication means is caused to transmit an E-mail where an image file formed in accordance with each mode is added.

73. An image communication method according to Claim 72, wherein the image file comprises a TIFF file, and wherein the Internet address comprises an E-mail address.

74. An image communication method according to Claim 70, wherein, when the real time mode has been selected, Internet facsimile communication means is caused to convert a procedure signal and image data into TCP packets, transmit the obtained TCP packets according to a T30 facsimile procedure, and convert TCP packets received from the communication partner's apparatus into a T30 frame.

75. An image communication apparatus having a plurality



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mode notification means for notifying a communication partner's apparatus of an Internet facsimile mode possessed by said image communication apparatus during communication in the G3 facsimile mode; and

76. An image communication apparatus according to Claim 75, wherein said address notification means notifies the communication partner's apparatus of the Internet facsimile address, according to reception of a signal instructing to which of Internet facsimile modes a mode is to be switched in response to notification of the mode after said mode notification means has notified the communication partner's apparatus of the Internet facsimile mode possessed by said image communication apparatus.

77. An image communication apparatus according to Claim 75, wherein the plurality of Internet facsimile modes comprise a simple mode, a full mode, and a real time mode.

78. An image communication apparatus according to Claim

79. An image communication apparatus according to Claim 78, wherein the image file comprises a TIFF file, and wherein the Internet address comprises an E-mail address.

80. An image communication apparatus according to Claim 77, further comprising communication means for receiving a procedure signal and image data as TCP packets according to a T30 facsimile procedure, for converting the received image data into image data for printing, and for converting the T30 procedure signal into TCP packets and transmitting the obtained TCP packets, and recording means for recording the image data for printing on a recording sheet, wherein when the image data has been received in the real time mode, said control means causes said communication means to receive the image data, and causes said recording means to record the



facsimile mode in response to notification that a transmitter's apparatus has an Internet facsimile function after notifying the communication partner's apparatus of the possession of the function.

84. An image communication method according to Claim 82, wherein the plurality of Internet facsimile modes comprise a simple mode, a full mode, and a real time mode.

85. An image communication method according to Claim 84, wherein, when an E-mail has been received in the simple mode or the full mode of Internet facsimile, an image file added to the received E-mail is converted into image data for printing in accordance with each mode, and the image data for printing is recorded on a recording sheet.

86. An image communication method according to Claim 85, wherein the image file comprises a TIFF file, and wherein the Internet address comprises an E-mail address.

87. An image communication method according to Claim 84, wherein, when receiving image data in the real time mode, a T30 procedure signal is converted into TCP packets according to a T30 facsimile procedure and the obtained TCP packets are transmitted, the procedure signal and the image

data are received as the TCP packets according to the T30 facsimile procedure, and the received image data is converted into image data for printing and the obtained image data for printing is printed on a recording sheet.

88. An image communication method according to Claim 83, a CFR signal is transmitted in response to reception of a signal instructing to which of Internet facsimile modes a mode is to be switched, and the Internet facsimile address is notified to the communication partner's apparatus by transmitting an optional frame transmitting the Internet address.

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